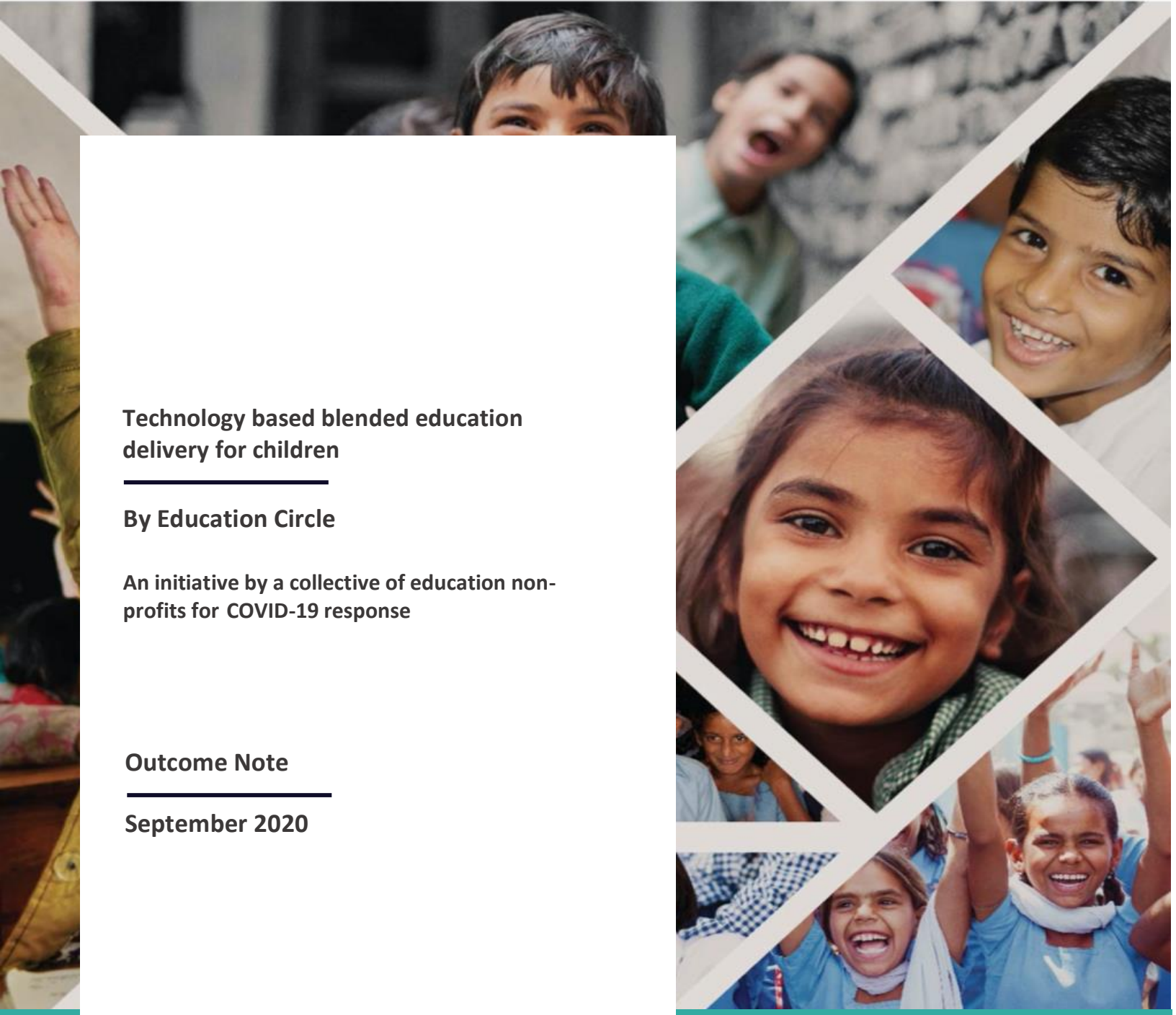

Technology based blended education delivery for children

By Education Circle

An initiative by a collective of education non-profits for COVID-19 response

Outcome Note

September 2020

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About the Education Circle

Considering the impact of COVID-19 crisis on children's education across the country, the Education Circle was created as a voluntary collective of 13 non-profits to:

- Identify high priority focus areas for the ecosystem to reimagine a new normal of education transformation
- Leverage practitioners experience to identify scalable and sustainable actionable approaches
- Identify actionable solutions that can be deployed by government at scale as well as by practitioners for enabling on-ground transformation

The non-profits, which are part of the Education Circle, work across multiple states in India and collectively impact more than 5 million children. These non-profits engage teachers, community, parents, children, government, and other NGOs to execute various kinds of interventions focused on education such as training, capacity building, content development, building life skills and program designing for the stakeholders. Participant organizations of the education circle collectively span across multiple geographies, have designed, and implemented programs across various aspects of the education sector, have worked extensively with the government and policymakers, and designed training modules to enable stakeholders across the education spectrum.

2020 Education Circle Participants

Education Circle is a voluntary COVID-19 response initiative facilitated by:

Following organizations were a part of the Working Group that have co-created this document:

Background of the Note

The COVID-19 crises have shaken the Indian economy with a pervasive impact on almost all the sectors. The pandemic resulted in a nationwide lockdown in mid-March to arrest the transmission risk of disease. While school closures were announced as an interim measure, extended closure has caused a further significant disruption in the ecosystem, **impacting an estimated 253 million students in India.**[1] Since then, several government interventions have been rolled out to maintain learning continuity and ensure students are engaged while at home. This has included the **introduction of classes through television, establishing regular teacher-student communications through WhatsApp or assessments through WhatsApp and more.**

On April 22, 2020, the Union Ministry of HRD launched VidyaDaan 2.0 on DIKSHA portal, a digital infrastructure for school education.[2] As on September 2, 2020 educators undertook around 430 Mn[3] learning activities (lessons and self-assessments) on the portal. However, there remains a vulnerable segment of the population who are unable to avail the benefits of shift in medium of education delivery.

Unplanned emphasis on technology driven education has excluded many children in this country from continuing school education during the pandemic. **Lack of infrastructure** in schools is another major challenge to combat. Besides infrastructural challenges, India is a diverse and multilingual country. Various dialects, various contexts and diverse lived experiences are what a classroom in India brings together. Therefore, there is need for learner content to be contextualized according to the learner capability – which might be difficult to achieve purely through digital modes of delivery. Even once the schools have reopened, it would be essential to **strategically prepare schools to face any such disruptions in the future** more efficiently and move towards a stronger and inclusive public education system.

Blended Learning is an approach to education that combines learning through online mediums (low to high technology modes) as well as opportunities for teacher-student interaction with traditional place-based classroom methods.

The participants of this Working Group in the Education Circle engaged in multiple working sessions to consolidate practitioner experiences and perspectives on technology based blended learning as a sustainable pedagogical tool.

This document summarizes the discussion outcomes on the following problem statements:

1. What should be the key **parameters** to consider while designing blended models of education?
2. What are some **case studies/** working models on blended education delivery?
3. What are the **recommended principles** for designing Blended Learning Models?

[1] School Education : Response to COVID-19; KPMG

[2] https://timesofindia.indiatimes.com/gadgets-news/government-launches-vidyadaan-2-0-to-boost-e-learning-content/articleshow/75299573.cms

[3] https://diksha.gov.in/data/

Need to design technology enabled blended learning models for children

The school shutdown resulting from COVID-19 crisis forced the government, schools and civil society organizations to adapt and transition from traditional learning methods to digital platforms to continue educating children. However, practitioners from organizations working with children during this period have shared learnings as well as concerns on how purely virtual modes of learning are currently inequitable due to following reasons:

1. **Uneven digital and electricity penetration** – The major challenge with virtual learning is disparity in access to electricity, internet and devices. While 99.9% of homes [4]in India have a power connection, the quality of electricity and the number of hours it is available for varies widely.[5] Only 24% Indians [6]own a smartphone and 11% of households [7]possess any type of computer/laptops/notebooks/tablets. Moreover, only 24% of Indian households have internet facility. Only a little over 15% of rural households have access to internet services. For urban households, the proportion is 42%.[8] This uneven spread makes it difficult for educators to design only tech-based learning models.

2. **Demotivated learner mind set** - A joint survey conducted by ASSOCHAM and Primus Partners [9]indicated that 88% of students missed interactions with their teachers, peers and friends while 51% of students missed their extracurricular activities such as physical education, art, music and dance. Bonding activities like interactions with teachers, peers and friends contribute to emotional adjustments for students at school. It is within the 40-hour week in the classroom that students develop their cognitive, social, and emotional behaviors. Additionally, having a daily timetable or schedule keeps discipline and structure in place.

3. **Insufficient training of teachers on digital pedagogy** – Around 17.6% of teachers [10]are uncomfortable with online education, according to the survey designed by the National Council of Educational Research and Training. Also, as per teachers' self-perception on knowledge and competency in Government schools, 40% of teachers were adept in word procession, 25% in PowerPoint Presentation, 20% in Internet Surfing and 30% in email.[11] Clearly, teachers are not ready to replicate teaching methods online. It is also not to be forgotten that not all teachers have access to technology.

4. **Challenges faced by parents –** A national survey conducted by LocalCircles, a social media and community platform, which received 8,287 responses from 204 districts of the country, indicated that 31% of parents were in favor of continuing ban on online classes while 49% were in favor of starting online classes but limiting it to 2 hours

[4] https://saubhagya.gov.in/

[5] https://missionantyodaya.nic.in/ma2018/preloginStateElectricityReport2018.html

[6] https://www.thehindu.com/news/national/24-pc-of-indians-have-a-smartphone/article26212864.ece

[7] http://mospi.nic.in/sites/default/files/publication_reports/KI_Education_75th_Final.pdf

[8] http://mospi.nic.in/sites/default/files/publication_reports/KI_Education_75th_Final.pdf

[9]https://www.assocham.org/userfiles/Online%20Readiness%20for%20Students%20and%20Teachers%20Report.pdf

[10] https://www.telegraphindia.com/india/covid-teachers-online-misery-revealed/cid/1789783

[11] Use of Information and Communication Technology in Secondary Schools – NITI Ayog

per day.[12] With adult literacy rate at 73.2% in India, some parents are not educated enough to guide their children during online classes. Moreover, due to limited smartphones and/or laptops at home, parents and children have to share the same devices for work and classes.

Due to these challenges, the practitioners necessitate shift of education from a purely virtual learning models (Radios, televisions, cloud-based tablets based) to blended learning models (which combine virtual and offline learning).

Framework for designing blended models of learning

The concept of blended learning emerges from the idea that education cannot be limited to school. During the lockdown, several methods such as digital mediums (WhatsApp, TikTok, TV, radio) were leveraged to actively disseminate information and share learning materials. However, despite several attempts a category of students was completely inaccessible over digital mediums because the students have migrated or live in remote parts of the state. The remaining who were able to access some learning materials were struggling to understand the concepts and missed the interpersonal connections at school. Additionally, COVID-19 crisis has taught us that tech-based learning within the confines of home also would not lead to holistic development of the learner.

Hence, need for a **co-learning model** becomes evident where learners can learn virtually outside school but also have access to offline learning spaces - intended to create a wholesome and integrated experience meeting the learner's intended learning outcomes.

Blended learning[13] is an approach to education that combines learning through virtual mediums (low to high technology modes) as well as opportunities for teacher-student interaction with traditional place-based classroom methods.

The definition of blended learning is a formal education program in which a student learns:
1. At least in part through online learning, with some element of student control over time, place, path, and/or pace
2. At least in part in a supervised brick-and-mortar location
3. And the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience.

Blended learning does not only address the mode of communication, but also addresses the content of education - with a **shift to application-based learning** and a *shift in the role of teachers as a guide and moderator*.

Based on discussions with practitioners of the Education Circle, a **Design Framework for Blended Learning has been created highlighting key points of learning and parameters for consideration while designing blended learning models.** Any blended learning model should ideally be at the intersection of these points of learning. With uneven distribution of resources throughout the country, it has also become obvious that one model does not fit all. In order to implement a blended learning model, it'll be important to determine the availability of resources and point of learning for that particular target region. The **key parameters can be used to identify scenarios for designing models contextual to agency that the children have** across the country.

[12] https://www.localcircles.com/a/press/page/online-school-classes-for-children#.X1cn3OfivIU

[13] https://www.christenseninstitute.org/blended-learning-definitions-and-models/

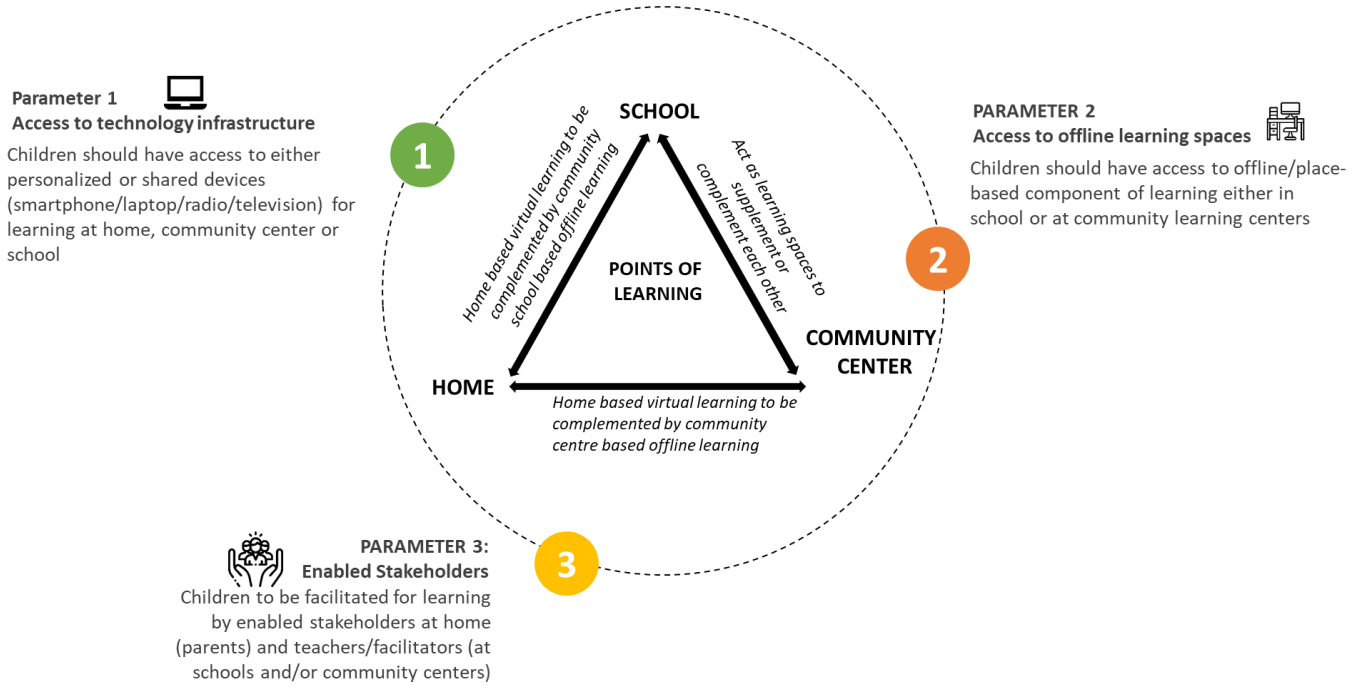

Figure: Design Framework for Blended Models of Learning

Scenarios for consideration while designing learning models

	Scenarios based on learning environment for children		
PARAMETERS	**Scenario 1: Ideal**	**Scenario 2 Medium**	**Scenario 3 No Learning**
Parameter 1 Availability of Technology Infrastructure	Children have adequate access to technology devices (personalized or shared laptop, tablets or smartphones) at Schools, Homes and/or Community Centers	Children have partial access to virtual learning either through shared devices (at school or community centers) or low-tech devices (such as TV, Radio etc.) at home	Children have no access to technology-based learning mediums at Schools, Homes and/or Community Centers
Parameter 2 – Access to offline learning spaces	Children have access to structured offline learning at school or community centers led/facilitated by teachers.	A section of the school is irregularly available for offline classes. Community centers do not always have conducive environment for offline learning.	Children do not have access to school and/or community center for learning
Parameter 3 – Enabled stakeholders as co-educators	Teachers, parents and community volunteers act as co-educators for children complementing each other's role	Teachers and/or parents/community members play an active role but are only partially equipped to support children effectively	Teachers and parents are not trained to carry out blended learning

	Blended Learning When a learning model design falls under the ideal scenarios in all TWO OR MORE parameters, it should be defined as a blended learning model.	**Partial Blended Learning** When a learning model design falls under the medium scenarios in TWO OR MORE parameters, it should be defined as a partial blended learning model.	

Parameter 1: Availability of technology infrastructure

One of the major challenges highlighted by practitioners of Education Circle is unavailability of tech infrastructure, especially in government schools. Despite high technological growth, only 0.2% of schools [14]in India have computers. Even when computers are available they tend to be used to just to provide basic computing skills for children. Less than 40% of student's households own desktop computers, while this proportion is lower in case of laptops and tablets. The survey further revealed that majority of students, especially in government schools, do not have computer facilities at home. [15]

The National Statistics Office reported that in 2017-18, only 23.8% of households had access to the web and only 20% of those aged five and above were able to use a computer.[16] In rural households (66 percent of the population), only 14.9 percent had access, and in urban households only 42 percent had access while only 12.5 percent students have access to smartphones.

Considering the above challenges, the practitioners have highlighted scenarios at three levels across schools, homes and community centers to consider before designing a blended learning model:

POINT OF LEARNING	**Scenarios based on learning environment for children**		
	Scenario 1: Ideal	**Scenario 2 Medium**	**Scenario 3 No Learning**
SCHOOLS	• Children have access to a functional computer lab with 1 computer for maximum 2 children • Children have access to fast speed internet (3G/4G) throughout learning hours	• Children have access to a partially functional computer lab or a computer lab with 1 computer per 5-6 students • Children have access to irregular internet connection throughout learning hours	• Children have no access to computer labs or internet connection
HOMES	• Children have access to technology devices such as laptop, smartphone or tablet with minimal sharing • Children have access to fast speed internet (3G/4G) during learner's study time	• Children have access to a television and/or a radio	• Children have no access to technology devices, television and radio

[14] https://files.eric.ed.gov/fulltext/EJ1184993.pdf

[15] 2017, Quality of Secondary Education in India; Concepts, Indicators, and Measurement – Charu Jain & Narayan Prasad

[16] https://www.newindianexpress.com/opinions/2020/aug/28/why-we-must-reopen-schools-now-2189316.html

	• Children have access to a television and a radio		
COMMUNITY CENTERS	• Children have access to a community center and/or a cyber cafe with computers that can be used by them	• Children have access to computers, community radios and televisions for limited time period. These devices are available for large groups, instead on need basis	• Children have no access to community centers or cyber cafes

Case studies/ Working Models

	Scenarios based on learning environment for children	Case Studies	Medium of instruction	Points of Learning	Summary
Parameter 1: Access to technology infrastructure	**HIGH**	Mindspark	Tablet	**School**	Personalized adaptive learning (PAL) solutions leveraged to identify and remediate student learning gaps at an individual level in government schools
	HIGH	ThinkZone Model	Tablet	**Home**	Leveraging pre-loaded tablets to deliver high quality and low-cost education to children in low resource communities
	MEDIUM	Sesame Workshop	Radio	**Community Center**	Alternate medium of transmission (Radio) leveraged to educate learners who lack access to regular schools and have inadequate technology infrastructure

Case Study 1 – Personalized adaptive learning (PAL) solutions leveraged to identify and remediate student learning gaps at an individual level in government schools

Problem Statement

Children in the same grade in government schools are not at same learning outcomes, especially in Rajnandgaon, Dantewada and Bastar (Chattisgarh) where average literacy rate of 33.2% is far below the national average.

Learning Model

The Mindspark software assists children in learning the fundamentals of the topics before calibrating to the next logical step that he/she should take in mastering the particular topic. The core model of this program is Personal Adaptive Learning (PAL) to match learning gaps.

Approach

Through MindSpark software, teachers are able to identify the knowledge gaps of every child and provide individual assistance in the form of adaptive content and assessments. The intervention began as early as class 1 so that the gaps in student learning could be tackled in the initial stages itself, much before they escalated into a learning crisis. Though long term goal is to improve learning outcomes, focus in the first year is to increase technology usage among students who come from the disadvantaged background.

To promote usage, a healthy inter-school competition was introduced to provide incentives, while each school also put up a weekly student leaderboard. A district-wide WhatsApp group was created to share best practices, announce competition results and provide support. The involvement of district education officers also provided a necessary push.

Case Study 2 – Leveraging pre-loaded tablets to deliver high quality and low cost education to children in low resource communities

Problem Statement

Lack of formative education and absence of pre-school education in four districts of Orissa with unreliable internet connectivity

Approach/Learning Model

ThinkZone uses a 'school-in-a-box' model that contains a set of age- and study-level appropriate, curriculum-based items that help engage students in the classroom. These include maps, charts and activity blocks for students and a tablet that is pre-loaded with guided lesson plans and day-wise material for teachers. Classes are held for around three hours a day, six days a week.

Model

ThinkZone leverages existing resources- aanganwadi workers and community educators. The ThinkZone team rigorously trains them to deliver quality early-grade education programs by using ThinkZone's technology, proprietary teaching resources, classroom activities, and management tools. They follow the "Teaching at the Right level", a pedagogical approach that involves evaluating children using a simple assessment tool and grouping them according to their learning levels instead of age.

The teachers are also trained regularly on technology skills, entrepreneurship skills, life skills and communication skills. ThinkZone uses an incentive mechanism to motivate the aanganwadi workers and community educators.

Case Study 3 – Alternate medium of transmission (Radio) leveraged to educate learners who lack access to regular schools and have inadequate technology infrastructure

Problem Statement

Children of migrant workers in marginalized communities lack access to regular schools. Many attend schools sporadically, with inadequate resources, or drop out of schools altogether. The migrant community uses **older technologies**, making them hard to reach and, consequently, underserved.

Approach/Learning Model

Seasame Workshop leveraged Community radios to educate children of primary and secondary grade who did not have access to regular schools and tech infrastructure.

Model

Under this project, 90 GGSS radio episodes in Hindi were broadcast across 10 community radio stations in Haryana, Himachal Pradesh, Madhya Pradesh, Uttarakhand, and Uttar Pradesh. Each of these episodes had messages around language and literacy, math and reasoning, health and nutrition, environmental awareness, social and emotional health. The program used content from the popular educational TV show called 'Galli Galli Sim Sim' by **combining easily available technology and storytelling** to uplift learning levels among children in rural regions of India, especially in areas that were beyond the reach of television. Each of these episodes had messages around language and literacy, maths and reasoning, health and nutrition, environmental awareness, social and emotional health. The project also leveraged the popularity and growing use of mobile phones in the community to increase access to GGSS radio show.

Outcome/Impact

1. Literacy and language witnessed significant gains as children exposed to GGSS content showed more than thrice as much improvement in vocabulary and storytelling ability
2. Meaningful transformation in practices and behaviors at the individual, the family and the community level including increased community participation towards children's learning and growth
3. It succeeded in addressing a need, improve learning outcomes amongst children and create a sustained listenership within the community, in a short span of 24 months.

Parameter 2: Access to offline learning space

Idea of blended learning model is to ensure that learners also have uninterrupted access to offline learning spaces (School, Home and Community Center). According to Rural Ministry Development[17], over 14% of villages in India don't have schools and 10 states in the country have over 15 per cent such villages. Moreover, 47% villages have schools only up to the primary level, 21 per cent villages have up to middle level schools (Classes 6 to 8), around 11 per cent have up to high schools (Classes 9 and 10) and only 6.57 per cent have up to senior secondary schools (Classes 11 and 12). Also, essentially not every village has a community center that can be utilized for learning.

Keeping in mind the above challenges, the practitioners have suggested scenarios at three levels across schools, homes and community centers as mentioned below

POINT OF LEARNING	Scenarios based on learning environment for children		
	Scenario 1: Ideal	**Scenario 2 Medium**	**Scenario 3 No Learning**
SCHOOLS	• Children have access to classrooms 6 days of the week for offline learning • Children have access to PPE and other hygienic essentials required to hold a class in an offline setup	• Children have access to classrooms 4-5 days of the week • Children have access to limited PPE and other hygienic essentials required to hold a class in an offline setup	• Children have no access to classrooms for offline learning • Children have no access to PPE or other hygienic essentials required to hold a class in an offline setup
HOMES	• Parents are able to drop their child to school • Children are able to travel to and fro to school on foot or via transportation • Multiple children from the same village are going to the same learning space hence can travel together • A student house/Terrace is used to hold small working	• Children are partially able to walk to school or other community spaces • Parents are able to drop their child to school, only sometimes • Transportation is only partially available to and fro	• Children are unable to walk to school or other community spaces due to distance • Parents are unable to drop their child to school, due to lockdown and travel restrictions • Transportation is not available to and fro

[17] https://theprint.in/india/governance/over-14-per-cent-villages-in-india-dont-have-schools-says-latest-data/170440/#:~:text=Mizoram%2C%20Kerala%20and%20Gujarat%2C%20meanwhile,up%20to%20high%20school%20level.

	groups with parents and teachers to plan for student		
COMMUNITY CENTERS	• Community members have agreed to use the community center space to hold meetings, SMC or conduct remediation classes • Children have access to PPE and other hygiene essentials in community center	• Community center space to hold meetings, SMC or conduct remediation classes only in case of emergency • Children have access to limited PPE and other hygiene essentials in community center	• Children do not have access to community centers • Community center have access to no PPE and other hygiene essentials

Case studies of Working Models

Following three Case Studies depict how the organizations have leveraged offline infrastructure to transform the education landscape in their target regions.

	Scenarios based on learning environment for children	Case Studies	Medium of instruction	Points of Learning	Summary
Parameter 2: Access to offline learning	**HIGH**	Blended 18 Model	Mobile applications	**School and Home**	EdTech leveraged model with some class facilitation to improve spoken English skills of students to increase employability

Case Study 1 – EdTech leveraged model with some class facilitation to improve spoken English skills of students to increase employability

Problem Statement

Improve English speaking skills of students to increase employability

Learning Model

This pilot included an action research project with the objective of evaluating the effectiveness of blended 18 model (18 hours offline and 40 hours online) - in improving college students' proficiency in speaking English and improving placement outcomes versus a control group.

Approach

1. 40 hours online using a randomly assigned app
2. Most assigned apps require strong internet
3. Most assigned apps provide feedback, offer clear instructions, and have a helpline for tech-related doubts
4. 18 hours in-person learning

Parameter 3 – Enabled stakeholders as co-educators

There are three key stakeholders in blended learning model – government, teachers and parents. Blended learning empathizes on the role of teacher to pivot from primary deliverers of education to mentors of learners. Role of parents is also required to transition from passive moderators to active mentors. Government is required to create a conducive environment to enable both teachers and parents in the education ecosystem.

As per NSS 71st round report, overall 75.7% male and 62% female were literate. In rural India, 72.3% Male and 56.8% Females and in Urban India 83.7% male and 74.8% females were literate in the year 2014[18]. Therefore, the biggest challenge in enabling stakeholders is to train them enough to participate actively their children's education. Hence, the practitioners have recommended scenarios at three levels across schools, homes and community centers for stakeholder parameter as mentioned below:

POINT OF LEARNING	Scenarios based on learning environment for children		
	Scenario 1: Ideal	**Scenario 2 Medium**	**Scenario 3 No Learning**
SCHOOLS	• Teachers are trained to implement blended learning model concepts • Teachers are trained to use technology infrastructure to the point they are able to guide their students • Teachers are trained to carry out both the components (offline/online) of blended learning model	• Teachers are partially trained to implement blended learning model concepts • Teachers can carry out either of the two components (offline/online) of blended learning model	• Teachers are not available • Teachers are not trained to carry out blended learning model concepts
HOMES	• Parents are willing and able to spend at least 1 hour with their students every day during study hours • Parents understand basic concepts of learning and is able to support their students • Parents are aware of COVID-19 impact on their children learning levels and takes specific precautionary measures for them	• Parents are willing to spend at least 1 hour with their students every day during study hours but unable to match schedules • Parents don't understand concepts of learning (especially through tech platforms) and is unable to support their students. However, they are curious to know what the students are learning through tech devices • Parents are partially aware of COVID-19 impact on their children learning levels and don't know how to support them	• Parents don't know how to support their children in the best possible way • Parents don't understand concepts of learning (especially through tech platforms). They believe that learning can happen only via school and teacher (classroom model) • Parents can't take out time and help their children as they are running multiple errands at the same time • Parents are unaware of COVID-19 impact on their children learning levels

[18]http://www.mospi.gov.in/sites/default/files/reports_and_publication/statistical_publication/social_statistics/Chapter_3.pdf

			and don't see the need of additional support
COMMUNITY CENTERS	• Volunteers (Parents/ Teachers/ College graduates) are available to guide students during their study time in community centers • Volunteers (Parents/ Teachers/ College graduates) are trained in blended learning education	• Volunteers (Parents/ Teachers/ College graduates) are not regularly available to guide students during their study time in community centers • Volunteers (Parents/ Teachers/ College graduates) are partially trained in blended learning education	• No volunteers are available to guide students during their study time in community centers • Volunteers are available but are not trained to effectively guide students during their study time in community center

Case studies of Working Models

Following two Case Studies depict how the organizations have leveraged stakeholder engagement to transform the education landscape in their target regions.

	Scenarios based on learning environment for children	Case Studies	Medium of instruction	Points of Learning	Summary
Parameter 2: Access to offline learning space	**HIGH**	The Seekh Initiative	Whatsapp	**Home**	Collaboration with UNICEF partners, district workforce, teachers and parents to deploy alternate learning solutions during COVID-19
	MEDIUM	Million Sparks	Mobile applications	**Home**	Up-skilling teachers through collaborative mobile application platform

Case Study 1 – Collaboration with UNICEF partners, district workforce, teachers and parents to deploy alternate learning solutions through WhatsApp during COVID-19

Problem Statement

Further deterioration of education in Sukma district of Chattisgarh due to COVID-19 crisis and lack of tech infrastructure

Approach/Learning Model

The Seekh initiative is unique in the sense that it relies more on collective effort and less on financials.
There is a ready database developed of around 5000 parents/children and teachers are creating school wise groups
Learning content includes language, mathematics and science which is further contextualized for child
District team and UNICEF are working to create feedback mechanisms and robust structures to make it two way learning

Model

The underlying strategy of this initiative is to collaborate both district work force and UNICEF partners to enable a structured communication channel with parents and children. SMC, Panchayat members and teachers are critical stakeholders. Few teachers and Cluster Academic Coordinators (CACs) were consulted in order to identify the potential platforms to engage with the community in the simplest way to facilitate learning at home.

Three major components of the initiative are:

1. Establishing a communication channel right from the UNICEF to the parents/children
2. Finalizing learning content with emphasis on creating child's learning trajectory
3. Developing a program structure to streamline the content flow to maximize the program impact **through whatsapp**

There is a great amount of focus on ensuring that everyone in the hierarchy ranging from district team block level functionaries, cluster coordinator and school teachers are part of the content flow mechanism. This was to create joint stakeholder accountability with clear roles and responsibilities.

Case Study 2 – Up-skilling teachers through collaborative mobile application platform

MILLION SPARKS FOUNDATION

Problem Statement

Teachers are not hired, supported and trained adequately, which in turn leads to teacher quality and quality of education being compromised

Approach/Learning Model

Adopting a complete online approach, Million Sparks programme is a complete teacher centered model. The facilitators conduct training webinars with teachers on a variety of skills like making interactive videos and conduct child centered learning.

Model

1. Provision of multiple online resources through partnerships with subject matter experts
2. Live class where one trainer can create a group/cohort of teachers to have joint sessions on either whatsapp or some other media
3. Teachers have to go through 6-10 hours of content per module

Recommended Principles for designing Blended Learning Models

The above case studies suggest that there are many working models currently in process by various organizations that are addressing the need for reform in the education sector. However, these models focus on only one or two of the three parameters. Hence, the practitioners in Education Circle have recommended five principles to design effective blended learning models for public education system in India. These principles place emphasis on making learning inclusive and learner centric to achieve the maximum benefit in the medium term, post COVID-19.

1

Equitable, Inclusive and Accessible

Blended education means teaching through both online and offline medium. By definition, it will only be accessible to those with devices and internet connections, at the very least in-school. Hence, models should be designed to reach those without devices through other means, including but not limited to radio, television and other offline devices. Availability and affordability of devices, internet infrastructure and other mediums for the most underprivileged and marginalized learners should be kept in mind while designing models.

2

Collaborative approach to learning

Government should aim at leveraging existing content, delivery methods, and existing stakeholder capabilities and networks when designing blended learning models. Centralized repository of content and Systematic Operating Procedures should be designed to serve as a guideline for states designing contents for their respective regions.

3

Design keeping learner at center

Blended learning models must be designed based on the **contextual needs and constraints of learners.** Learning models must be in vernacular languages and culturally appropriate. The platform should work on low bandwidth/offline and call centers must be operational for technical assistance to learners. Blended learning models should also ensure a **healthy balance among face to face interaction, non-digital remote activities and digital learning**. Offline discussions, remediation and group work should be included in the models.

4

Ensure safety, security of data and emotional well-being

Students' social and emotional health must be integrated into blended learning, including in remote components. Role of teachers should be re-defined as guides, mentors and coaches who enable students to take ownership of their success. Teachers should regularly check up on students for queries and support. Tele- counselling should be another addition to the blended learning model. **Learners must also be aware of and protected against cyber threats and harassment.** Platforms should be designed to ensure highest level security in mind.

5

Sustainability and Scalability

The models recommended must not be only in the light of COVID-19 and must keep a **mid-term, post COVID-19 lens in mind**. While some elements of the design can adapt with time, the overall purpose of the blended learning model should be to minimize learning gap. The models proposed must be scalable **and should not be designed basis a geography or target segment.**

Recommended focus for the Short term (1-3 years)

Practitioners recommend that the for the next 1-3 years, the focus of learning for children should be on remediation/minimizing learning gaps for learners at grade level which should be enabled through technology based blended learning models in a structured manner.

In order to enable this, it is recommended that government as well as ecosystem players focus on the following:

1. **Develop understanding of digital learning as a pedagogy tool**
    a. Condense the curriculum to be aligned to a combination of digital tools and offline mode of delivery – For instance, State Council for Education Research and Training can create blended lessons
    b. Establishing systems and processes to enable digital pedagogy by teachers – For instance, State governments can strategize roadmap to install hardware in schools over the next 3 years and also budget for obsolescence of hardware
    c. Building basic digital skills among teachers to use the digital tools efficiently - For instance, a facility in Block Resource Coordinator for teachers to practice, record and observe themselves using digital tools can be implemented. A feedback mechanism can be executed to track improvement in digital skills
    d. Building basic digital skills among students to use the digital tools efficiently
    e. Creating contextualized, high quality vernacular content by state governments

2. **Mindset shift on purpose and process of education delivery** (for teachers, parents as well as children)
    a. Focus on mindset shift for teachers and parents to accept delivery of education through digital mediums

3. **Formative Assessments to understand efficacy of blended learning models**
    a. Assessing delivery of education via teachers (Teacher actions and Student actions)
    b. Assessment to improve learning amongst learners by using data
    c. Assessment to measure effectiveness of using interactive/gamified/adaptive content for lower grades

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